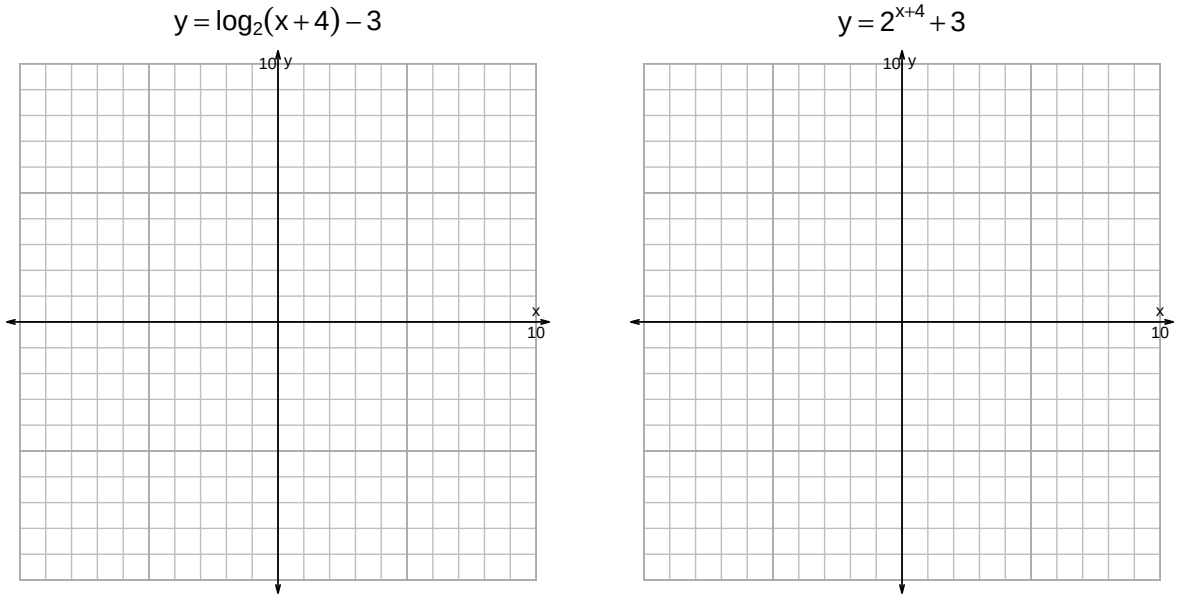
Name: Date:

S18QUIZ: EXP LOG (QUIZ V245)

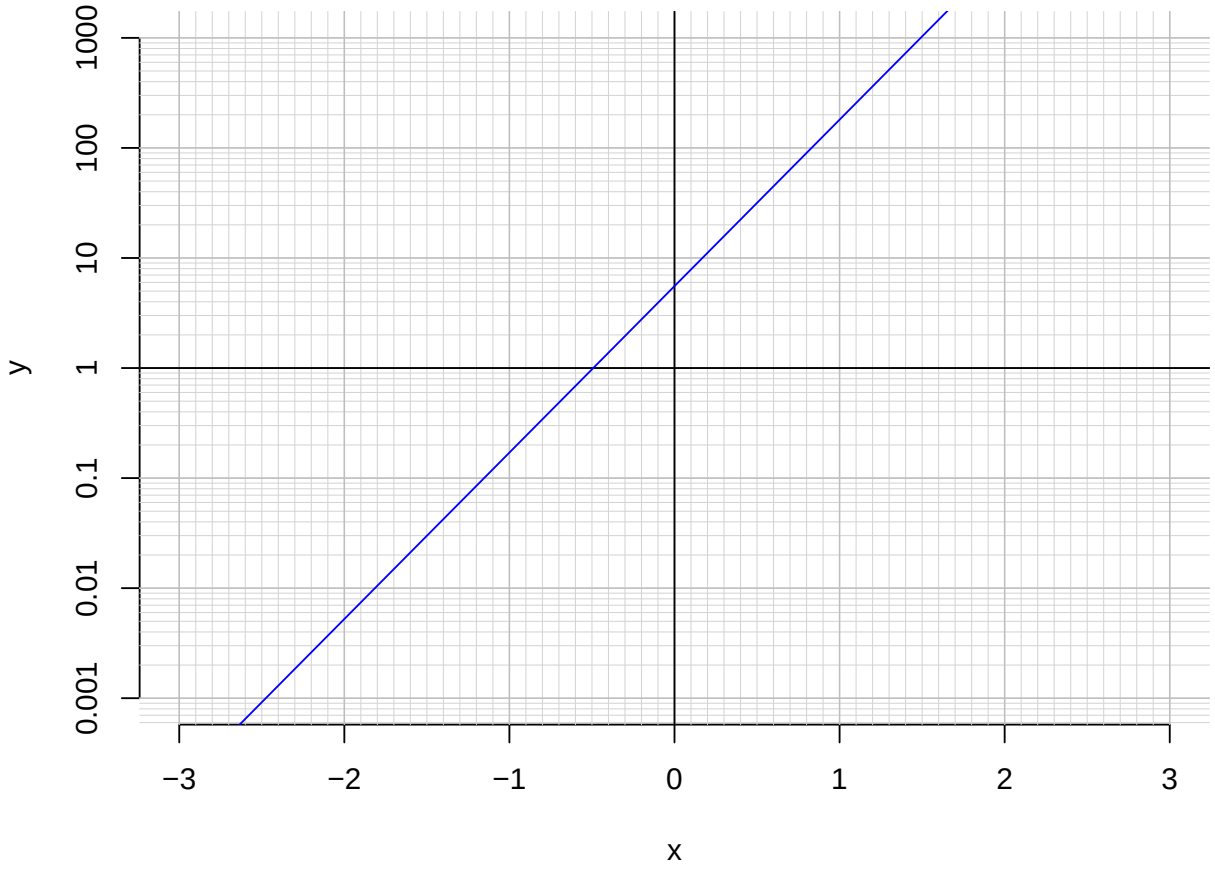
1. Graph $y = \log_2(x + 4) - 3$ and $y = 2^{x+4} + 3$ on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$19 = \left(\frac{7}{5}\right) \cdot 10^{4t/3}$$

3. An exponential function $f(x) = 5.55 \cdot e^{3.48x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(-1.3)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(90)$.